

IN THE CLAIMS:

Please cancel claims 1-8 without prejudice or disclaimer, and add new claims 9-22, as shown below in the detailed listing of all claims which are, or were, in the application:

Claims 1-8 (Canceled)

9. (New) A method of separating a colouring agent from recycled fibre material, in which method the recycled fibre material containing a colouring agent is defibered using a liquid, so that colouring agent contained in the recycled fibre material is separated from the recycled fibre during the defibration,

wherein the recycled fibre material and liquid are first applied to a separate pre-breaker for pre-kneading the recycled fibre material, that the pre-kneaded recycled fibre material together with liquid and gas or a gas mixture are applied to a double-action impact mill comprising at least two concentrically rotating rings having impact surfaces and radial openings, such that adjacent rings rotate in opposite directions relative to one another, that the recycled fibre material, the liquid and the gas or the gas mixture are applied in the middle of the rings, from where they are thrown from one impact surface to another, and, by the action of centrifugal force, radially outwards from the middle

in such a manner that the substantially continuous material flow applied to the double-action impact mill is broken in the gas into small material flow parts that are finally thrown through the openings between the impact surfaces outside the double-action impact mill, and that the efficient treatment time of the recycled fibre material in the double-action impact mill is at most two seconds, the colouring agent attached to the recycled fibre material being separated from the recycled fibre material as it hits the impact surfaces of the rings, allowing the colouring agent to be removed in further processing from the generated pulp suspension discharged from the double-action impact mill.

10. (New) The method of claim 9, wherein the efficient treatment time of the recycled fibre material in the double-action impact mill is at most one second.

11. (New) The method of claim 9, wherein the double-action impact mill comprises at most four coaxially arranged rings.

12. (New) The method of claim 9, wherein chemicals for enhancing the separation of the colouring agent and/or its remaining separated and/or for enhancing further processing are applied to

the double-action impact mill simultaneously together with the recycled fibre material.

13. (New) The method of claim 12, wherein one of the chemicals applied is an alkali.

14. (New) The method of claim 12, wherein said alkali chemical is sodium hydroxide.

15. (New) The method of claim 12, wherein at least one of the chemicals applied is a collector chemical.

16. (New) The method of claim 15, wherein said collector chemical is a soap.

17. (New) The method of claim 12, wherein one of the chemicals applied is water-glass.

18. (New) The method of claim 12, wherein one of the chemicals applied is hydrogen peroxide.

19. (New) The method of claim 9, wherein said colouring agent comprises a printing ink.

20. (New) The method of claim 9, wherein said liquid comprises water containing auxiliary chemicals.

21. (New) The method of claim 9, wherein said separate pre-breaker is a pulper.

22. (New) The method of claim 9, wherein said gas mixture comprises air.